

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF WISCONSIN**

**MIKKELSEN GRAPHIC ENGINEERING INC.,
Plaintiff,**

v.

Case No. 07-C-0391

**ZUND AMERICA, INC., et al.,
Defendants.**

DECISION AND ORDER

This is a suit for patent infringement brought by Mikkelsen Graphic Engineering, Inc. (“MGE”) against Zund America, Inc. (“Zund” or “Zund America”) and Zund Systemtechnik AG (“Zund Systemtechnik”). In an order dated April 7, 2011, I decided the parties’ cross-motions for summary judgment regarding infringement and other issues. (Docket #266.) Before me now are the parties’ motions for reconsideration.

I. PROCEDURAL BACKGROUND

I will assume that the reader of this opinion is familiar with my summary-judgment decision. In that decision, I made three rulings that are relevant to the present motions. First, I ruled that Zund directly infringed the apparatus claims of the ’168 and ’187 patents by selling vision systems equipped with either an OptiSCOUT software package (any version) or a GTK Cut or Touch & Cut software package (through version 29). Second, I ruled that Zund did not directly infringe the apparatus claims of the ’168 and ’187 patents by selling cutting systems equipped with a GTK Cut or Touch & Cut software package in which the search function had been disabled (versions 30 and later). Third, I ruled that Zund Systemtechnik was not liable for inducement because MGE had not raised a genuine

issue of material fact concerning whether Zund Systemtechnik acted with the requisite state of mind.

Zund asks that I reconsider my finding of direct infringement of the apparatus claims of the '168 patent with respect to the versions of the software capable of searching, and MGE asks that I reconsider my finding of no infringement of either patent with respect to the versions of GTK Cut and Touch & Cut in which the search function was disabled. MGE also asks that I reconsider my finding that Zund Systemtechnik is not liable for inducement.¹

II. DISCUSSION

A. Direct Infringement of Apparatus Claims of '168 Patent – All OptiSCOUT and Versions 29 and Earlier of GTK Cut and Touch & Cut.

The '168 patent contains several apparatus claims, claim 3 being the only independent apparatus claim and the only one containing the language relevant to the present issue. It claims:

An apparatus for cutting a graphics area from a sheet of material bearing such graphics area and a plurality of registration marks in predetermined positions with respect thereto, a subset of the marks being initial-position/orientation-determining marks on no more than one side of the graphics area, the apparatus being of a type including (a) a sheet-receiving surface, (b) a main sensor adapted to sense the subset in a field of view of the main sensor to determine a position and orientation of the sheet of material and approximate positions of the plurality of registration marks and to sense precise positions of the marks, and (c) a cutter operatively connected to the sensor and movable about the sheet-receiving surface, the cutter adapted to cut the graphics area from the sheet of material in response to the precise positions of the marks sensed by the main sensor,

¹In addition to the issues identified in the text, Zund asks that I reconsider other issues addressed in the April 7 order. However, for the reasons explained on the record at a status conference held on May 25, 2011, I will not reconsider those issues. (See Tr. of May 25, 2011 conference [Docket #275].)

the improvement comprising a coordinate region locator which includes the main sensor, the coordinate region locator adapted to automatically determine a coordinate region of the subset on the sheet-receiving surface and to automatically reposition the main sensor to the coordinate region such that the subset is within the field of view of the main sensor.

(Emphasis added.) In my summary-judgment decision, I did not expressly address whether a Zund vision system that is equipped with OptiSCOUT software or versions 29 and earlier of GTK Cut and Touch & Cut software satisfies the claim language regarding “on no more than one side of the graphics area.” I did not do so because the parties did not raise any issues with respect to that language, and so I assumed that it was not in dispute. However, Zund now disputes that its devices satisfy this language, and so I will consider whether they do.

As discussed in more detail in my summary-judgment decision, the '168 patent claims an apparatus that automatically cuts decals or other graphics from sheets of material. The apparatus senses “registration marks” that have been printed around the graphics area on the sheet of material for the purpose of guiding the automatic cutting process. A “subset” of the registration marks are “initial-position/orientation-determining marks.” The purpose of the initial-position/orientation-determining subset is to enable the computer to quickly estimate the location of the remaining registration marks. The idea is that once the initial-position/orientation-determining registration marks have been sensed, the computer has enough information about the placement of the sheet on the cutting surface to infer the approximate locations of the remaining registration marks. This saves

time, in that the sensor does not have to scan the entire sheet in order to find all of the registration marks.²

The disputed claim language appears in the preamble of claim 3. In describing the sheet of material that the claimed apparatus is to operate on (i.e., the workpiece), the preamble states that the initial-position/orientation-determining marks printed on the sheet must be “on no more than one side of the graphics area.” This requirement is related to the speed of the operation: if the initial-position/orientation-determining subset was composed of two marks located, say, on opposite corners of the sheet of material, it would take longer for the sensor to sense the entire subset than if the marks were located close together, on the same side of the graphics area.

Zund argues that its accused devices do not satisfy the “on no more than one side of the graphics area” language because, in a Zund vision system equipped with the relevant software, it is not necessary to place initial-position/orientation-determining marks on no more than one side of the graphics area. Rather, the accused devices are capable of operating on a sheet of material even if the marks are located on opposite corners of the graphics area. However, Zund concedes that its vision systems are capable of cutting graphics from a sheet of material in which the initial-position/orientation-determining marks are located on only one side of the graphics area. (Reply Br. [Docket #291] at 8-9.)

²The reader should recall that under my construction of the '168 patent, initial-position/orientation-determining marks do not have to look any different than the other registration marks. Rather, any registration mark can serve as an initial-position/orientation-determining mark. In any given cutting operation, which marks are initial-position/orientation-determining marks and which marks are ordinary registration marks is determined by the order in which the marks are sensed: sensing the location of the first two marks determines the position and orientation of the sheet of material and the approximate positions of the remaining registration marks.

Essentially, then, Zund is arguing that its products do not infringe the apparatus claims of the '168 patent because they are capable of operating on workpieces that are not described in the preamble of claim 3.

This argument finds no support in patent law. Literal infringement occurs when all of the elements of the claim are found in the accused device. See, e.g., Builders Concrete, Inc. v. Bremerton Concrete Prods., Co., 757 F.2d 255, 257 (Fed. Cir. 1985). No case holds that it is necessary for the accused device to operate exclusively on the workpiece described in the claim. Thus, if the accused device embodies all of the elements of the claim and is capable of operating on the described workpiece, a sale of that device will infringe. The fact that the accused device is also capable of operating on other workpieces is simply irrelevant.

In the present case, the elements of claim 3 are the elements of the apparatus itself: the sheet-receiving surface, the main sensor, the cutter, the coordinate region locator, and the means for controlling these components (i.e., the computer running the software). The sheet of material is the workpiece, not an element of the apparatus. The elements of the claim are embodied in Zund's devices, and it is undisputed that those devices are capable of operating on sheets of material having initial-position/orientation-determining marks on no more than one side of the graphics area. It is thus irrelevant that the devices are also capable of operating on sheets of material having initial-position/orientation-determining marks on more than one side of the graphics area. Zund's motion for reconsideration of my finding of literal infringement is therefore denied.

B. Direct Infringement of '168 and '187 Patents – Software with Search Function Disabled.

The next issue is whether sales of Zund systems along with versions 30 and later of the relevant software packages infringe MGE's apparatus claims. As discussed in my summary-judgment decision, starting with version 30 of these software packages, Zund began disabling the search function. (The search function is the novel part of MGE's invention.) Zund disabled the search function by modifying a part of the software known as the configuration files, and this had the effect of instructing the computer running the software to ignore the part of the source code that contains the instructions for performing a search operation. However, Zund did not delete the source code itself, and when MGE tested the accused device, it was able to reactivate the search function by changing a "no" to a "yes" in two different lines of text in the configuration files.

It is MGE's position that the mere presence of source code for searching in Zund's device causes a sale of that device to infringe the apparatus claims of the '168 and '187 patents, even if the user will not be able to perform a search function unless that user modifies the device by changing the configuration files. As I explained in my summary-judgment decision, whether this is correct depends on the claim language. If an element of the claim is source code for searching, then a sale of a device that contains source code for searching (along with all of the other elements recited in the claim) will infringe even if the configuration files prevent the source code from causing the device to perform a search operation. However, if the claim does not include source code for searching as an element but requires that the device actually be capable of performing a search operation, then a sale of that same device will not infringe.

In their summary-judgment briefs, the parties did not discuss any specific claim language as being relevant to this issue, and my reading of the claims without the benefit of the parties' input led me to conclude that source code for searching was not itself an element of the claims. MGE now asks that I reconsider this ruling and find that the apparatus claims read on a device that contains disabled source code for searching.

MGE directs my attention to two apparatus claims in the '168 patent, claim 3 (independent) and claim 8 (dependent). They provide as follows:

3. An apparatus for cutting a graphics area from a sheet of material bearing such graphics area and a plurality of registration marks in predetermined positions with respect thereto, a subset of the marks being initial-position/orientation-determining marks on no more than one side of the graphics area, the apparatus being of a type including (a) a sheet-receiving surface, (b) a main sensor adapted to sense the subset in a field of view of the main sensor to determine a position and orientation of the sheet of material and approximate positions of the plurality of registration marks and to sense precise positions of the marks, and (c) a cutter operatively connected to the sensor and movable about the sheet-receiving surface, the cutter adapted to cut the graphics area from the sheet of material in response to the precise positions of the marks sensed by the main sensor, the improvement comprising a coordinate region locator which includes the main sensor, the coordinate region locator adapted to automatically determine a coordinate region of the subset on the sheet-receiving surface and to automatically reposition the main sensor to the coordinate region such that the subset is within the field of view of the main sensor.

8. The apparatus of claim 3 wherein the coordinate region locator includes a controller adapted to (a) move the main sensor in a predetermined pattern surrounding the expected location of the subset, and (b) stop the movement of the main sensor when the coordinate region of the subset is located within the field of view of the main sensor.

(Emphasis added.) MGE then directs my attention to two claims in the '187 patent, claim 13 (independent) and claim 17 (dependent):

13. In an apparatus for cutting at least one graphics area from a sheet of material bearing a combination of such graphics area(s) and a plurality of registration marks in predetermined positions with respect to the

graphics area(s), such combination being in a predetermined approximate position and orientation with respect to a set of reference features of the sheet of material, such apparatus including (a) a sheet-receiving surface, (b) a main sensor, (c) a cutter operatively connected to the sensor and adapted to move about the sheet-receiving surface to cut the graphics area(s) from the sheet of material in response to precise positions of the marks sensed by the main sensor, the improvement comprising: reference feature identifier means for automatically determining a coordinate region of the reference features if the reference features are not in an expected coordinate region on the sheet-receiving surface, and for sensing metrics of the reference features in order to infer the approximate positions of the registration marks when the coordinate region of the reference features is known.

17. The apparatus of claim 13 wherein the reference feature identifier means includes controller means for (a) moving the main sensor in a predetermined pattern surrounding the expected coordinate region of the reference features, and (b) stopping the movement of the main sensor when the reference features are located within the field of view of the main sensor.

(Emphasis added.)

MGE argues that the '168 claim language requiring a "coordinate region locator adapted to [searching]" or a "controller adapted to [searching]" reads on a device that contains software source code for searching, whether or not the source code has been disabled. Similarly, MGE argues that the '187 claim language requiring "reference feature identifier means for [searching]" or "controller means for [searching]" reads on a device that contains software source code for searching, whether or not the source code has been disabled. I disagree with both arguments.

No claim language in either patent specifically claims software source code as an element of any apparatus claim. Rather, the claims speak in terms of "locators," "controllers" and "identifiers" that perform search functions. MGE does not contend that "locator," "controller" and "identifier" are terms of art meaning "source code," and so the claims cannot be construed to mean "source code adapted to" searching or "source code

means for” searching. Moreover, the language of the claims requires the locators, controllers and identifiers to contain structure that is capable of performing the function of searching. Although the combination of source code containing instructions for searching and configuration files written to allow that source code to cause a computer to execute a search function is structure capable of performing that function, the combination of source code containing instructions for searching and configuration files written to prevent the computer from executing a search function is not. Thus, the claim elements “coordinate region locator adapted to [searching],” “controller adapted to [searching],” “reference feature identifier means for [searching],” and “controller means for [searching]” are not present in a device that contains disabled source code for searching.

MGE points out that a user need only “switch on” the search function by modifying the relevant lines of text in the configuration files, and it argues that this shows that the structure for searching is present in Zund’s device even if the user does not modify the configuration files. However, the configuration files are part of the accused device, and so if the user modifies the configuration files, the user is modifying the structure the device. There is thus no sense in which the structure for searching could be said to be present in Zund’s device prior to the time that the configuration files are modified. It is the modification that supplies the structure that performs the function. And the fact that a device is capable of being modified to operate in an infringing manner does not, by itself, support a finding of infringement. See, e.g., Telemac Cellular Corp. v. Topp Telecom, Inc., 247 F.3d 1316, 1330 (Fed. Cir. 2001). Although the modification in this case is quite simple – changing a “no” to a “yes” in two different places within the configuration files – it is still a modification, just like writing lines of code for searching into a program that did

not already contain it would be a modification. Therefore, Zund's sale of the accused device with the source code for searching disabled was not literal infringement. Accord Typhoon Touch Techs., Inc. v. Dell, Inc., 659 F.3d 1376, 1380-81 (Fed. Cir. 2011) (holding that where an apparatus claim requires that a device actually be programmed or configured to perform a certain function, a sale of a device that is only capable of being programmed or configured to perform that function does not infringe).

The cases on which MGE primarily relies, Finjan, Inc. v. Secure Computing Corp., 626 F.3d 1197 (Fed. Cir. 2010) and Fantasy Sports Properties v. Sportsline.com, 287 F.3d 1108 (Fed. Cir. 2002), are distinguishable. In both of those cases, the patents contained claim language that read on source code for performing specific functions. In Finjan, the claim language used terms such as "logical engine for," "communications engine for," "linking engine for," and "program code for," and the Federal Circuit interpreted these terms as requiring "software components with specific purposes." 626 F.3d at 1205. At the time of sale, the accused device contained software components for performing the relevant functions. However, the user could access the functions performed by the components only by purchasing a separate key that "unlocked" the functions. Although the defendant argued that this prevented a sale of the software from infringing, the court disagreed. It found that because the structure claimed in the patent was software components with specific purposes, and because the accused device contained that structure, it did not matter that other parts of the device prevented the components from achieving their purposes – the "claimed structure" was still in the accused software. Id. In the present case, MGE has not claimed software components. It has claimed locators, controllers and identifiers that perform search functions. As explained, when locators, controllers and

identifiers contain disabled source code for searching, those locators, controllers and identifiers do not contain structure capable of performing search functions. Thus, the claimed structure was not present in Zund's devices at the time of sale.

In Fantasy Sports, the claim language called for a "computer for playing football based upon actual football games," which the Federal Circuit construed to cover "software installed on a computer that enables a user to play fantasy football games." 287 F.3d at 1111, 1118. Other limitations in the claim required the software to perform certain functions, such as awarding bonus points for unusual scoring plays. Id. at 1118. The court emphasized that so long as the accused software contained the means for performing the required functions, a sale of the software would infringe even if it was up to the user of the software to activate those functions. Id. Again, this was because the claims specifically claimed the software that performed the function. In contrast, MGE has not claimed any software code. It has claimed locators, controllers and identifiers that perform a search function. And that function is not present in locators, controllers and identifiers that contain disabled software code for performing a search function.

Accordingly, I will not disturb my finding of no infringement with respect to Zund devices running versions 30 and later of GTK Cut and Touch & Cut software.

C. Inducement.

The remaining issue has to do with the state of mind that gives rise to liability for inducement of infringement under 35 U.S.C. § 271(b). MGE contends that Zund Systemtechnik is liable for inducement because it actively induced Zund America to sell vision systems controlled by the versions of OptiSCOUT, GTK Cut and Touch & Cut that render the systems infringing. I granted summary judgment on this issue to Zund

Systemtechnik because the admissible evidence in the record would not have permitted a reasonable jury to find that Zund Systemtechnik had the state of mind necessary to commit inducement – namely, intent to induce acts that one knows constitute patent infringement. I found that because the meaning of MGE’s patents was reasonably disputed, Zund Systemtechnik could not have intended to induce Zund America (or anyone else) to commit infringement of those patents. The most that Zund Systemtechnik could have intended was to induce Zund to commit acts that would constitute patent infringement if the patent was, at some point in the future, construed in a particular way. Essentially, I concluded that encouraging another to commit acts under circumstances in which one knows that there is a risk that those acts constitute patent infringement does not lead to liability under § 271(b). Knowledge of a risk that the acts might constitute infringement is not enough; the inducer must know that the acts constitute infringement.

MGE asks that I reconsider this decision in light of a case that the Supreme Court decided shortly after I issued my summary-judgment decision, Global-Tech Appliances, Inc. v. SEB S.A., __ U.S. __, 131 S. Ct. 2060 (2011). In that case, the court considered whether inducing another to commit acts under circumstances in which the inducer is deliberately indifferent to a risk that the acts induced constitute patent infringement gives rise to liability under § 271(b). The Court held that it does not, and that “induced infringement under § 271(b) requires knowledge that the induced acts constitute patent infringement.” Id. at 2068. Global-Tech thus does not change the state-of-mind element for inducement in any way that could be considered favorable to MGE. Rather, it confirms

that knowledge of only a risk that the acts induced constitute patent infringement does not give rise to liability.³

In addition to urging reconsideration based on Global-Tech, MGE makes a slightly different argument in its reconsideration briefs. It argues that the knowledge element of an inducement claim is satisfied even if the inducer does not know at the time he or she induces another's acts that the patent would be construed to read on the accused device. MGE points out that claim construction is a question of law, and that therefore allowing an inducer to avoid liability for infringement based on a mistake in interpreting the claims in a patent would be to recognize a "mistake of law" defense. MGE then contends that existing caselaw does not recognize such a defense.

Although the phrase "mistake of law defense" does not appear in the inducement caselaw, it is nonetheless clear that the inducer must know that the acts induced constitute patent infringement. Global-Tech, 131 S. Ct. at 2063. As the Federal Circuit has stated, "inducement requires evidence of culpable conduct, directed to encouraging another's infringement, not merely that the inducer had knowledge of the direct infringer's activities."

DSU Med. Corp. v. JMS Co., Ltd., 471 F.3d 1293, 1306 (Fed. Cir. 2006) (en banc as to cited material). The use of the term "culpable conduct" makes clear that the inducer must actually intend that the acts induced result in infringement of a patent. And such intent

³In Global-Tech, the Court also held that the doctrine of willful blindness applies to § 271(b), see 131 S. Ct. at 2068-70, but MGE does not argue that that doctrine is implicated in the present case. Nor could it, as there is no evidence that Zund Systemtechnik deliberately shielded itself from clear evidence that the acts it induced constituted patent infringement.

cannot exist when the inducer has a reasonable belief that the claims will be construed in a way that renders the acts induced non-infringing.

MGE argues that the knowledge requirement is satisfied so long as the inducer has knowledge that the relevant patent exists, but Federal Circuit precedent that was left undisturbed by Global-Tech makes clear that the inducer must also know that the acts induced will constitute infringement of the claims of that patent. In DSU Medical, the Federal Circuit found that an inducer had “no intent to infringe” even though it had knowledge that the patent existed. 471 F.3d at 1307. The evidence that supported this finding included the fact that the inducer had obtained opinions from lawyers stating that the accused device would not infringe the patent. Id. Obviously, if liability could be premised on knowledge of the patent alone, these opinions would not have saved the defendant from liability for inducement. Thus, DSU Medical confirms that, in addition to knowing that a patent exists, an inducer must know that that patent will be construed in a way that results in the acts induced constituting infringement.⁴

⁴In its briefs, MGE contends that the Supreme Court’s decision in Aro Manufacturing Co. v. Convertible Top Replacement Co., 377 U.S. 476 (1964) (Aro II), supports the notion that an inducer need only have knowledge of the patent, and not also specific intent to encourage infringement of that patent, in order to be liable. However, Aro II, which involved contributory infringement rather than inducement, does no such thing. To the contrary, it holds that in order to be liable for contributory infringement, a defendant must actually know that its actions are contributing to the infringement of a patent. Id. at 488 (holding that § 271(c) “does require a showing that the alleged contributory infringer knew that the combination for which his component was especially designed was both patented and infringing”). Moreover, the defendant in Aro II did not argue that it was not liable for contributory infringement on the ground that it believed that the patent would be construed in a way that rendered the accused product non-infringing. Instead, as far as the record revealed, it was obvious that the product was infringing. Id. at 489-90. Thus, Aro II does not support the notion that a defendant can be liable for inducement or contributory infringement when it is not obvious that the accused device is infringing.

MGE also seems to contend that an inducer will have a culpable mental state

In the present case, there is no admissible evidence indicating that Zund Systemtechnik intended to encourage Zund America to infringe the '168 or '187 patents. Even assuming that Zund Systemtechnik knew of the patents, it was reasonable for it to believe that the accused vision systems did not infringe. This is evidenced by the fact that I have had to reconsider my construction of the patents' claims and whether they read on Zund's vision systems a number of times throughout the course of this case. Although I have resolved most of the disputes over the claim language in MG's favor, many of the issues were close calls. Thus, Zund Systemtechnik could not have known ahead of time that its vision systems would be deemed infringing. Therefore, no reasonable jury could find that Zund Systemtechnik acted with the mental state necessary to create liability for inducement.

III. CONCLUSION

For the reasons stated, **IT IS ORDERED** that the parties' motions for reconsideration (Docket ##268 & 269) are **DENIED**. **IT IS FURTHER ORDERED** that the parties' motions to file sur-reply briefs (Docket ##281, 282 & 293) are **GRANTED**.

Dated at Milwaukee, Wisconsin, this 8th day of December 2011.

s/_____
LYNN ADELMAN
District Judge

whenever he receives notice from the patentee that the patentee considers the accused device to be infringing. However, when the meaning of the claims is subject to reasonable dispute, receipt of a self-serving letter from the patentee stating that the claims will be construed in her favor does not impart intent to infringe to the inducer. Rather, it is only when it is obvious that the accused device is infringing that notice from the patentee serves the purpose of notifying the inducer of the existence of the patent.